In the Claims:

Following is a list of all pending claims.

1. (Currently Amended) An electronic package, comprising:

a substrate having a first surface and four edges;

an electronic device having two long edges and two short edges and mounted on the first surface of the substrate, each device edge being parallel to one of the four substrate edges; and

a heat spreader with a lid and only two parallel sidewalls extending therefrom, each sidewall being attached to the first surface of the substrate along one edge of the substrate;

wherein each of the two short device edges is substantially closer to its parallel substrate edge than each of the two long device edges is to its parallel substrate edge such that there is more space on the substrate between each of the two long device edges and its parallel substrate edge than between each of the two short device edges and its parallel substrate edge for receiving the two parallel sidewalls of the heat spreader.

2. (Previously presented) The electronic package of claim 1, wherein the device is substantially a rectangle that has two long edges and two short edges and the substrate is substantially a square that has four edges of equal dimension, and the device is mounted in the central region of the first surface of the substrate such that the two long edges are substantially parallel to two opposite edges of the four edges of the substrate and the two sidewalls of the heat spreader are attached to the two opposite edges of the substrate parallel to the two long edges of the device.

3. (Original) The electronic package of claim 1 wherein the substrate is made of a material whose coefficient of thermal expansion is about 17 PPM/°C.

4. (Original) The electronic package of claim 1 wherein the heat spreader is attached to the substrate in a high temperature environment.

5. (Original) The electronic package of claim 4 wherein the high temperature environment is about 220°C.

6. (Original) The electronic package of claim 1 wherein the heat spreader is attached to the substrate by an adhesive material.

7. (Original) The electronic package of claim 6 wherein the adhesive material is epoxy.

8. (Original) The electronic package of claim 1 wherein package warpage is within the limit of a specification.

9. (Original) The electronic package of claim 1 wherein the heat spreader is made of metal.

10. (Original) The electronic package of claim 1 wherein the heat spreader is made of copper.

11. (Original) The electronic package of claim 1 wherein the heat spreader is made of materials with coefficient of thermal expansion similar to that of copper.

12. (Previously presented) The electronic package of claim 1 wherein the height of each sidewall is about 0.6 mm.

13. (Previously presented) The electronic package of claim 1 wherein the width of each sidewall of the heat spreader is about 2 mm.

14. (Original) The electronic package of claim 1 wherein the length of the heat spreader is about the same as the length of the substrate.

15. (Original) The electronic package of claim 1 wherein the dimensional difference between the electronic device and the substrate in at least one direction is smaller than 7 mm.

16. (Original) The electronic package of claim 1 wherein the electronic device is a semiconductor integrated circuit.

17. (Withdrawn) A method for packaging an electronic device, comprising:
mounting the electronic device on a first side of a substrate; and
mounting a heat spreader on the first side of the substrate covering the electronic device, the heat spreader including two parallel channels, wherein the heat spreader is mounted by attaching each channel along one edge of the substrate.

18. (Withdrawn) The method of claim 17, wherein the device is substantially a rectangle that has two long edges and two short edges and the substrate is substantially a square that

has four edges of equal dimension, and the device is mounted in the central region of the first surface of the substrate such that the two long edges are substantially parallel to two opposite edges of the four edges of the substrate and the two parallel channels of the heat spreader are attached to the two opposite edges of the substrate parallel to the two long edges of the device.

19. (Withdrawn) The method of claim 17 wherein the heat spreader is attached to the substrate through an adhesive material in a high temperature environment.

20. (Withdrawn) The method of claim 19 wherein the adhesive material is epoxy, the high temperature environment is about 220°C, and the heat spreader is made of a material with a coefficient of thermal expansion similar to that of copper.

21. (Withdrawn) The method of claim 17 wherein the thickness of each channel is about 0.6 mm, the side width of each channel of the heat spreader is about 2 mm, and the length of the heat spreader is about the same as the length of the substrate.

22. (Previously presented) A semiconductor package, comprising:

a substrate having four edges;

a semiconductor device having two long edges and two short edges and mounted on a first side of the substrate through a plurality of solder joints, each device edge being parallel to one of the four substrate edges; and

a heat spreader mounted on the first side of the substrate covering the semiconductor device, the heat spreader having a lid and only two parallel sidewalls extending therefrom, each sidewall being attached to the first side of the substrate along one edge of the substrate;

wherein each of the two short device edges is substantially closer to its parallel substrate edge than each of the two long device edges is to its parallel substrate edge such that there is more space on the substrate between each of the two long device edges and its parallel substrate edge than between each of the two short device edges and its parallel substrate edge for receiving the two parallel sidewalls of the heat spreader.

23. (Previously presented) The semiconductor package of claim 22, wherein the device is substantially a rectangle that has two long edges and two short edges and the substrate is substantially a square that has four edges of equal dimension, the device is mounted in the central region of the first surface of the substrate such that the two long edges are

substantially parallel to two opposite edges of the four edges of the substrate and the two sidewalls of the heat spreader are attached to the two opposite edges of the substrate parallel to the two long edges of the device.

24. (Original) The package of claim 22 wherein the heat spreader is attached to the substrate through an adhesive material in a high temperature environment.

25. (Original) The package of claim 24 wherein the adhesive material is epoxy, the high temperature environment is about 220°C, and the heat spreader is made of a material with a coefficient of thermal expansion similar to that of copper.

26. (Previously presented) The package of claim 22 wherein the height of each sidewall is about 0.6 mm, the width of each sidewall of the heat spreader is about 2 mm, and the length of the heat spreader is about the same as the length of the substrate.